

	<b>MARITIME INDEPENDENT VILLAGES: A FORM OF MARITIME RESILIENCE THROUGH STRENGTHENING THE CAPACITY OF COASTAL COMMUNITIES IN PONIPINGAN VILLAGE, CENTRAL SULAWESI</b>
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<b>Article History:</b> Received: YY-MM-DD Revised: YY-MM-DD Accepted: YY-MM-DD	<p><b>Abstract:</b>  This article aims to provide insights into service activities focused on enhancing village capacity through waste management, thereby strengthening maritime resilience in Ponipingan village, a coastal area in Bunobogu District, Buol Regency. The activities involved counseling on the "Desa Mandiri Maritim" (Maritime Independent Village) system and training sessions to empower the local community. The result of research research follows a qualitative normative approach, drawing on data and outcomes from these service initiatives. The implementation of the maritime resilience concept led to improved village capacity by engaging both community members and village officials. It demonstrated that effective waste management can bolster maritime resilience and empower coastal communities. Furthermore, these practices offer a model that can be replicated in other coastal villages, promoting sustainable development. This article contributes to a deeper understanding of how integrating maritime resilience strategies with community empowerment through waste management can positively impact the capacity and sustainability of coastal regions.</p> <p><b>Keywords:</b> Village Capacity; Maritime Independent Village; Maritime Resilience; Coastal Village</p>

INTRODUCTION

Human resources in the village or identical to the village apparatus are one of the supporters of the village and an important factor in administering the government. Village officials must have the capabilities or skills, understanding, knowledge, insight, behavior, attitudes, and values that support the village apparatus to carry out the duties and functions of village officials in achieving village development itself. Moreover, it is known that villages in Indonesia have various characteristics. There are villages located in the lowlands, highlands and coastal areas. Indonesia is an archipelagic country with a vast sea and a long coastline. This encourages the village government to know that the implementation of village governance is not only related to village governance and programs in general but also to understanding maritime affairs. Developing human resources or village apparatus in the maritime sector is very strategic for Indonesia regarding economic, socio-cultural, and legal aspects (KKP, 2012).

Let us examine in depth the programs carried out to increase the capacity of village officials in maritime education, especially in the legal aspect. It still feels lacking because many programs implemented are only centered on how the institutional administrative system is. However, it cannot be denied that this governance system is very important, and education is critical. Maritime and food in the village have also contributed to realizing national development. Why not? The



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management and administration of village government based on something other than legal insight can also plunge village officials into legal problems (WikipediaIndonesia, 2020).

The existing condition of Ponipingan village as a coastal village is an opportunity and a challenge to transform the paradigm of thinking about maritime resilience. The paradigm that has been developed is that this concept is related to the military and security aspects; even from the management point of view, the people of Ponipingan village have less interest in managing marine space and marine products optimally. This can be seen from the dominance of the livelihoods of the village community, not fishermen, but farmers (LPPM-UNG, 2022).

Ponipingan Village is one of the villages in the Bunobogu District, Buol Regency. Its population is 2022, consisting of 197 families. Ponipingan Village is a fairly small village with an area of 267 hectares, consisting of three hamlets: Liang Hamlet, Pobuyoton Hamlet and Bulalo Hamlet. Most of the people of Ponipingan Village work as farmers (BPSKab-Buol, 2022).

Of course, a real contribution is needed to respond to the above conditions in order to obtain several strategic concepts related to the maritime education strategy towards Superior Indonesia that can answer national and global challenges.

## METHODS

From the description of the problems described above, it can be formulated the stages of the Community Service program, which focuses on marine waste management in the coastal village of Ponipingan through several programs (LPPM-UNG, 2022):

- Conducted socialization on the concept of maritime resilience in the village through counseling on the integration system of "independent villages"maritime" and through the management of marine debris in Ponipingan village, whose orientation is on a paradigm shift in viewing marine debris that can be managed in a better way;
- Creation of information boards on Marine Waste and demonstration bins in the villageponiping
- Conducting manufacturing training can support the community's economy
- Implementing the "Smart Beringin" program for early childhood aims to inculcate the values of nationalism through the potential and natural resources in the village and preserve the coastal environment where they live.

The following method is used in relation to the program to increase village and village community income through eco-brick marine waste management in Ponipingan village (LPPM-UNG, 2022).

- The survey method that will be used to determine the type of waste and waste generated by the people of Ponipingan village
- The method of assisting the formation of the "Independent Maritime Village" integration system is classifying and structuring village data online, forming youth groups as "youth love the sea," and optimizing the role of village officials according to their respective duties and functions.
- The method of counseling, as well as socializing the concept of maritime resilience in Ponipingan village
- Ecobrick training is part of marine waste management. It involves training on the management of agricultural products into highly nutritious snacks for early childhood and training on the management of agricultural waste into organic fertilizer.
- Education for early childhood through best practice activities inculcating values about self-awareness of environmental cleanliness.



## RESULT AND DISCUSSION

**Maritime Security Policy in the Village.** Definition of Coastal According to (Soegiarto, 1976; Dahuri et al., 2001), it is a meeting area between land and sea. The land covers the part of the land, both dry and submerged in water, which is still influenced by the characteristics of the sea, such as tides, sea breezes, and saltwater infiltration. Meanwhile, the sea includes the part of the sea that is still influenced by natural processes that occur on land, such as sedimentation and freshwater flow, as well as those caused by human activities on land, such as deforestation and pollution. Maritime Villages are villages in coastal areas or coastal areas that are directly adjacent to the sea. Indonesia is one of the maritime countries with many islands, where 70 percent of the area is the sea, making many village areas directly adjacent to the sea or villages with beaches. The natural conditions and location of the area make coastal villages characterized as dense residential areas; most of the people living in coastal villages depend on the sea for their livelihood or as fishermen. The results of the village census (PODES) show that in 2011, the number of villages in Indonesia was 78,609 villages, of which there were 11,884 villages (15.12 percent) in maritime villages that were close to coastal villages, namely those with beaches or bordering the sea. Sixty-six thousand seven hundred twenty-five villages are not coastal, or about 84.88 percent. The legal basis for regional autonomy was first ratified by Law No. 22 of 1999 and was later revised into Law No. 32 of 2004. Since the enactment of the Law, the expansion of regions, the formation of new autonomous regions in Indonesia, or the formation of new administrative regions at the district/city level from the parent has become increasingly widespread. Regional expansion is not only at the district/city level but also at the sub-district level and even at the village level; within 3 years of the following Podes data collection, the number of villages has reached 82,190 villages, an increase of 3,581 villages or an increase of about 81.27 percent. The number of coastal villages from the 2014 PODES results was recorded as 12,827 villages; within three years, several villages were expanded, resulting in 943 coastal villages. While the number of non-coastal villages reached 69,363 villages, there was an addition of 2,638 villages within three years. In 3 years, in the following Podes data collection, the number of villages reached 82,190; there was an addition of 3,581 villages or an increase of about 81.27 percent. The number of coastal villages from the 2014 PODES results was recorded as 12,827 villages; within three years, several villages were expanded, resulting in 943 coastal villages. While the number of non-coastal villages reached 69,363 villages, there was an addition of 2,638 villages within three years. In 3 years, in the following Podes data collection, the number of villages reached 82,190; there was an addition of 3,581 villages or an increase of about 81.27 percent. The number of coastal villages from the 2014 PODES results was recorded as 12,827 villages; within three years, several villages were expanded, resulting in 943 coastal villages. While the number of non-coastal villages reached 69,363 villages, there were an additional 2,638 villages within three years (BPS-RI, 2015).

**Development of Ponipingan Village into a Maritime Independent Village.** According to Rukin (2015), maritime development includes economic development, education improvement, community empowerment and adequate health services. Empowerment must be carried out based on benefits, needs, and the availability of existing potential to change the community's mindset in carrying out a gradual pattern of change. Empowerment requires assistance until community independence is achieved. The community needs serious and quality assistance from the initial processing of the potential availability in the village to the following stages to the marketing stage to achieve the goal of developing community and village/coastal self-reliance.

Maritime village development is a new idea that aims to provide opportunities for the development and progress of villages in Indonesia in coastal areas/coastal areas. Moreover, if we





want Indonesia to become a maritime center in Southeast Asia, then development will be carried out. The government does not only focus on the Coastal/Beach area but also has to be oriented to the Coastal, sea and land areas because they are interconnected. Maritime village development itself can be carried out when the fulfillment of the supporting factors for the implementation of Maritime village development, including:

- Adequate transportation,
- The existence of quality human resources,
- There is a development focus starting from villages to cities, and open city then to the village,
- Empowerment and infrastructure improvement are the main tools in the development of coastal communities.

A development program is needed as a sustainable development effort. Likewise, appropriate and targeted development is the initial key to improving the economy and welfare of coastal communities. Villages on the coast and small islands must be developed according to their potential.

The maritime village development program is a process of change, development, and progress in various aspects of villages in coastal areas/coastal areas and small islands in Indonesia. The development must be comprehensive, namely the management of coastal natural resources oriented to the coast, sea and land because all of them are interconnected. Managing coastal and marine natural resources is carried out sustainably, including developing several essential sectors for coastal communities and small islands. So that maritime villages can be independent, villages on the coast and small islands need comprehensive development, especially the regional economy, so that the people of coastal villages are no longer poor and can be independent.

The government can prepare human resources in coastal villages and small islands with skills and training to enable them to manage coastal and marine natural resources, which in turn can run sustainably for the coastal communities. Several vital sectors that the government must develop in coastal villages and small islands are;

- 1) The government needs to organize village funds in accordance with the current village law, including establishing village cooperatives as an effort to expel moneylenders or middlemen who have been impoverishing fishermen.
- 2) Adequate infrastructure needs to be built, such as ports or small piers, to facilitate trade transportation between islands and cities. This port also provides access to other logistics needs.
- 3) Construction of health and education facilities. These two facilities are very basic and must be the government's obligation so that every village has them. Health facilities in the village are very important because the large number of deaths in remote small islands is also due to the lack of health facilities such as health centers and doctors. Meanwhile, educational facilities produce a generation of people who think more advanced and independent.

The three points above must be a priority in developing villages on the coast and small islands in Indonesia; if this is realized, the village will be safe, and the people who move to the city will not be abandoned again. However, the village will become lively, advanced and independent because its people manage it. Then, the coastal villages and villages on small and front islands will be the main line of realizing the maritime axis.

**Internalization of the "Maritime Independent Village" Integration System in Ponipangan Village.** The coastal area of Indonesia, an archipelagic country, is rapidly developing, considering that coastal areas are easy to reach and can provide relatively cheap space compared to the mainland.

Therefore, the coast is subject to migration. Nearly 60% of the 4,444 residents of big cities such as Jakarta, Surabaya, Semarang, Medan and Makassar are concentrated in coastal areas (Adibroto, 1999, p. 125; Dahuri et al., 2001; Burbridge, 1988). In general, coastal cities in Indonesia play various roles, including as potential providers of natural resources, industrial estates and ports, fisheries, tourism, and settlements. In addition, most cities in Indonesia are located in coastal areas due to easy access and connections between the island and the region. Therefore, Coastal management is an essential factor that needs to be considered in supporting Indonesia's development. The integration system "Desa Mandiri Maritim" recognizes coastal management through policies consisting of the institutional framework and legal authority required for coastal management development and planning, as well as comprehensive sectoral environmental objectives set out in the integration system later.

This "Maritime Mandiri Village" integration system aims to maximize the coast's potential and minimize the negative impacts of coastal management on both natural resources and the environment. An integration system like this has existed for a long time, as Integrated Coastal Zone Management (ICZM) was first proposed at the World Coastal Conference in the Netherlands in 1993. This forum determined that PWPT is the most appropriate process for managing coastal issues. Both current and long-term concerns include habitat, water quality degradation due to pollution, changes in the water cycle, loss of coastal resources, sea level rise and the impact of climate change globally (climate change). The concept of PWPT is to overcome various obstacles and problems in coastal management, such as conflict of interest, lack of priorities, legal certainty, lack of knowledge of regional position, and other social factors, which state that it provides proper planning. And management framework for. Lack of information and resources.

The internalization of the Maritime Independent Village in Ponipingan village is specifically carried out through community empowerment and increasing the village government's capacity because the general public's existence must be internalized in the development, planning and implementation of integrated coastal resource management. Partnership factors must be developed among all parties involved in the planning and evaluation process. The components involved in the coastal management partnership include the Ponipingan village community, government (central and local), non-governmental organizations, mass media, private sector, donors, international organizations and the scientific community. Several aspects that affect the community of Ponipingan village become the driving force behind the status and existence of the coastal area. Community-based management has at least four benefits. (1) Community participation in the management of surrounding resources, (2) Support from the broader community in managing existing resources, (3) Availability of data needed to utilize these resources, and (4) resource management can improve people's lives surrounding them. To achieve these benefits, several stimulating activities were carried out in Ponipingan village, including:

**Establishment of an integrated system of "Desa Mandiri Maritim" and marine waste management as a form of Maritime Resilience in the Ponipingan Coastal Village.** This program was successfully achieved through collaboration between field supervisors, students and the village government. It started with a discussion about mapping the village's natural and human resources. It followed up with youth organizations that still needed to be formed and the involvement of women from the recitation groups to mobilize village TP PKK women. The payload material referred to in the integration system includes:

Involvement of stakeholders in the maritime, fisheries and marine security sector. In the counseling on maritime security, students invited parties from Babinkamtibmas to provide socialization about the threat of natural disasters, security aspects of the military, and social security

of coastal communities both at sea and on land.

Creating a Baseline exists in Ponipingan Village, which is summarized from the results of the initial survey by students, consisting of:

- Socioeconomic status that collects household-based demographic information
- Types of Household Productive Activities
- Domestic fishing practice
- The attitude of the population towards the activity of utilizing coastal resources in the village of Ponipingan
- Census of fish species and coral reef condition

Empowerment of women from the recitation group, which is the largest social group in Ponipingan village, to become a women fisherman group, which is also determined directly by the village head

Ponipingan Village Service Community Service KKN students are building a pilot temporary disposal site (TPS Besar) to sort recycled waste generated by the community from the sea.

**Ecobrick-based marine waste management training.** The waste management training was carried out by collecting as many types of organic waste as possible in the village's coastal environment and inner circle. Plastic waste, materials, and equipment were collected. Then, students demonstrated how to make sofas from the waste in front of the forum, most of whom were recitation group women. Besides being attended by most of the women from the recitation group, the training activities were also attended by village officials, the community and even children in the Ponipingan village environment.

**Counseling and training on processing superior commodities of marine and agricultural products into food ingredients to prevent stunting.** The counseling was then continued with training to process corn into snacks that can be consumed in early childhood by involving women from the village PKK group in collaboration with KKN students.

## CONCLUSION

The capacity of the village, from the community to the village apparatus, needs to optimize its role. A coastal village has a unique typological area and differs from most other village areas. Therefore, villages need to have strong resilience, from the aspect of preventing natural disasters and environmental resilience to socio-cultural and economic resilience. This resilience is formed by optimizing the capacity of the village itself. Managing marine waste and waste is just one approach to increasing community empowerment and willingness in developing villages. However, the most strategic and vital aspect is public awareness to protect the village environment by not littering or processing waste into valuable goods or having economic selling value. To realize this, synergistic work is needed between the district government, sub-district government, Ponipingan village government and the entire community to carry out village development that is more resilient, clean and healthy. The activities carried out are only stimuli that reinforce the resources owned by the Ponipingan village, which are abundant natural resources, mutually cooperative human resources, and strong governance typical of coastal indigenous peoples. This supports the efforts of the independence of the entire community to develop their village into a "Maritime Independent Village." The activities carried out are only stimuli that reinforce the resources owned by the Ponipingan village, which are abundant natural resources, mutually cooperative human resources, and strong governance typical of coastal indigenous peoples. This supports the efforts of the independence of the entire community to develop their village into a "Maritime Independent Village." The activities carried out are only stimuli that reinforce the resources owned by the





Ponipingan village, which are abundant natural resources, mutually cooperative human resources, and strong governance typical of coastal indigenous peoples. This supports the efforts of the independence of the entire community to develop their village into a "Maritime Independent Village."

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